



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,662	03/06/2006	Ralf Noerenberg	286630US0PCT	1237
22850 7590 11/25/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER PARVINI, PEGAH				
ART UNIT 1793		PAPER NUMBER		
NOTIFICATION DATE 11/25/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/570,662

Applicant(s)

NOERENBERG ET AL.

Examiner

PEGAH PARVINI

Art Unit

1793

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 16, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 2, 10-15 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-4, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,892,734 to Okubo et al. in view of U.S. Patent No. 5,407,665 to McLaughlin et al.

Okubo et al. (column 12, lines 1-30) teach the synthesis of 2-styryl-4-amino-11-hydroxyanthraquino[3,2-d] oxazole (from now on referred to as compound A); during the process of such synthesis, they disclose that first a compound called 2-styryl-4-nitro-11-hydroxyanthraquino[3,2-d] oxazole (from now on referred to as compound B) is synthesized and dried. Then, 3 parts of compound B is mixed with 50 parts of butyl-cellosolve and 3 parts of an iron powder. The mixture is agitated, boiled, filtered and added to ice water; however, it is then filtered off, water-washed and dried to give the product of compound A which is in the form of powder.

It is to be noted that butyl cellosolve is a synonym for 2-butoxyethanol (i.e. butyl glycol) which follows the structure of formula (I) for n=4, x=1, y=0 and R=H. Therefore, the reference is seen to read on the composite material as claimed instantly specially because the final product is dried (i.e. water-free and alcohol free) even though water has been added at certain stage and is powder (i.e. solid).

It is to be noted that the recitation of claim 4 drawn to the method/the way to prepare the formula (I) as claimed in claim 1 is considered process limitation in a product claim; claim 4 is a product-by-process claim. The same is true for claims 18-19; in other words, said claims are, also, product-by-process claims. With reference to product-by-process claims, MPEP § 2113:

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The limitation of claim 1 directed to the alkoxylation and any subsequent purification process is, again, process limitations in a product claim.

It is to be noted that based on McLaughlin et al. (column 2, lines 35-45; claim 3), 2-butoxyethanol (i.e. butyl cellosolve) is an alkoxy or glycol ether.

Claims 1, 3-4, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,377,608 to Daudt et al. in view of U.S. Patent No. 5,407,665 to McLaughlin et al.

Daudt et al. disclose a process through which certain compounds including 2-butoxyethanol and powdered zinc oxide are mixed. The final obtained solution is applied to a glass and allowed to air-dry until it formed a hard coating (i.e. solids, water-free and alcohol-free).

It is to be noted that 2-butoxyethanol (i.e. butyl glycol) follows the structure of formula (I) for $n=4$, $x=1$, $y=0$ and $R=H$.

It is to be noted that the recitation of claim 4 drawn to the method/the way to prepare the formula (I) as claimed in claim 1 is considered process limitation in a product claim; claim 4 is a product-by-process claim. The same is true for claims 18-19; in other words, said claims are, also, product-by-process claims. With reference to product-by-process claims, MPEP § 2113:

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The limitation of claim 1 directed to the alkoxylation and any subsequent purification process is, again, process limitations in a product claim.

It is to be noted that based on McLaughlin et al. (column 2, lines 35-45; claim 3), 2-butoxyethanol (i.e. butyl cellosolve) is an alkoxy or glycol ether.

Allowable Subject Matter

Claims 2, 10-15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art do not disclose a compound having the structure of formula (I) as

claimed in instant claim 1 wherein $y = 1$ or 2 , $x = 2-12$ or $2-10$ or $3-8$, R is methyl, ethyl or benzyl which is mixed with 85-99.9% by weight of organic and/or inorganic water-insoluble particles or pigments wherein the final product would be solid, water-free and alkanol-free.

Response to Arguments

Applicant's arguments, see pages 6-11 regarding the fact the structure of Roberts et al. reference does not meet the limitation of instantly claimed formula (I), filed August 11, 2009, with respect to the rejection(s) of claim(s) 1-4 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Okubo et al., as detailed out above, is presented. Thus, instant action is made Non-Final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PEGAH PARVINI whose telephone number is (571)272-2639. The examiner can normally be reached on Monday to Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pegah Parvini/
Examiner, Art Unit 1793

/Anthony J Green/
Primary Examiner, Art Unit 1793